

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1.-15. (Canceled)

16. (Original) A core for use in a motor, said motor including N and S magnetic poles for generating a magnetic field to which said core is opposed, said core comprising:

a plurality of slots formed in said core, said slots have an electrical angle which is one of:

a) between 80 degrees and 95 degrees; and

b) between 20 degrees and 35 degrees

a number of said magnetic poles is  $2m$  and a number of said slot is  $3n$  ( $m$  and  $n$  are integers,  $m$  is greater than or equal to 4)

wherein said core is configured by combining  $P$  core shapes each having their respective slots displaced by an angle equal to one- $2P$ -th the cycle of basic cogging torque  $((180/n \cdot k)^\circ)$  in mechanical angle, where  $k$  is a least common multiple of  $2m$  and  $3n$ ).

17.-34. (Canceled)

35. (Original) A core for use in a motor, said motor including N and S magnetic poles for generating a magnetic field to which said core is opposed, said core comprising:

a plurality of slots formed in said core, said slots have an electrical angle which is one of:

a) between 80 degrees and 95 degrees; and

b) between 20 degrees and 35 degrees

wherein a number of magnetic poles is  $2m$  and a number of slots of said core is  $3n$  ( $m$  and  $n$  are integers),

wherein said core is configured by combining  $j$  core shapes each having their slots displaced by an angle equal to one- $2j$ -th ( $j$  is an integer equal to 3 or more) the cycle of basic cogging torque ( $(180/j \cdot k)^\circ$  in mechanical angle, where  $k$  is a least common multiple of  $2m$  and  $3n$ ).

36.-37. (Canceled)

38. (Original) The core as described in claim 16 wherein

said core is structured by laminating thin plates of magnetic material.

39.-40. (Canceled)

41. (Original) The core as described in claim 35 wherein

said core is structured by laminating thin plates of magnetic material.

42.-44. (Canceled)

45. (Original) A motor including:

(a) magnetic field generating means having N and S magnetic poles for generating a magnetic field; and

(b) a core made of magnetic material and opposed to said magnetic field generating means;

wherein one of said magnetic field generating means and said core rotates with respect to the other,

wherein a number of said magnetic poles is  $2m$  and a number of slots of said core is  $3n$  ( $m$  and  $n$  are integers,  $m \geq 4$ ),

a plurality of slots formed in said core, said slots have an electrical angle which is one of:

a) between 80 degrees and 95 degrees; and

b) between 20 degrees and 35 degrees

wherein said core is configured by combining P core shapes each having the slots displaced by an angle equal to one-2P-th the cycle of basic cogging torque  $((180/n \cdot k)^\circ$  in mechanical angle, where k is a least common multiple of 2m and 3n).

46.-47. (Canceled)

48. (Original) A motor including:

(a) magnetic field generating means having N and S magnetic poles for generating a magnetic field; and

(b) a core made of magnetic material and opposed to said magnetic field generating means;

wherein one of said magnetic field generating means and said core rotates with respect to the other,

wherein in a case where a number of said magnetic poles is 2m and a number of slots of said core is 3n (m and n are integers),

a plurality of slots formed in said core, said slots have an electrical angle which is one of:

a) between 80 degrees and 95 degrees; and

b) between 20 degrees and 35 degrees

wherein said core is configured by combining j core shapes each having the slots displaced by an angle equal to one-2j-th (j is an integer equal to 3 or more) the cycle of basic cogging torque  $((180/j \cdot k)^\circ$  in mechanical angle, where k is a least common multiple of 2m and 3n).

49. (Canceled)

50. (Original) The motor described in claim 45 wherein

polarization is performed at a skew angle of  $(200/k)^\circ$  or less in central angle (k is the least common multiple of 2m and 3n).

51.-52. (Canceled)

53. (Original) The motor described in claim 48 wherein

polarization is performed at a skew angle of  $(200/k)^\circ$  or less in central angle (k is the least common multiple of 2m and 3n).

54. (Canceled)

55. (Original) The motor described in claim 50 wherein

polarization is performed at a skew angle ranging from  $(80/k)^\circ$  to  $(100/k)^\circ$  in said central angle.

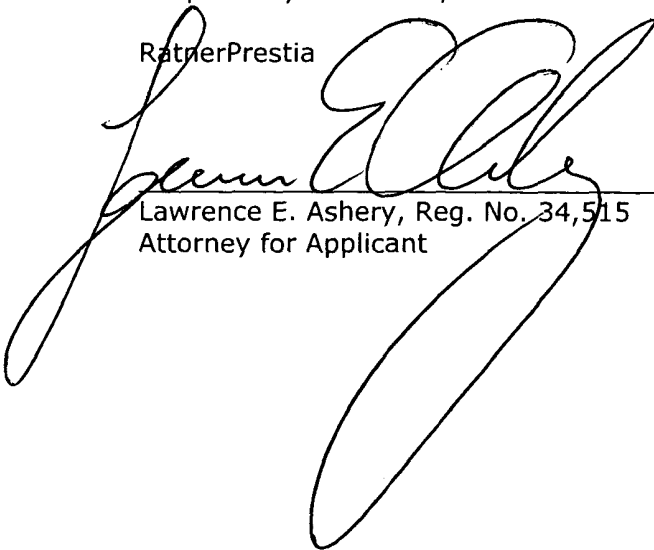
56.-57. (Canceled)

58. (Original) The motor described in claim 53 wherein

polarization is performed at a skew angle ranging from  $(80/k)^\circ$  to  $(100/k)^\circ$  in said central angle.

Respectfully submitted,

RatnerPrestia

  
Lawrence E. Ashery, Reg. No. 34,515  
Attorney for Applicant

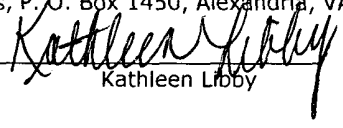
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P.O. Box 980  
Valley Forge, PA 19482-0980  
(610) 407-0700

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